

CLAIMS:

1. An apparatus for detecting the presence or position of an ophthalmic product in a container, comprising:

(a) source of electromagnetic energy located relative to the container to direct electromagnetic energy at the container;

(b) a detector disposed relative to the container and the source to detect electromagnetic energy from the source which passes through or is reflected by the product and the container; and

(c) a processor for determining the presence or position of the product in the container responsive to fluorescence, absorption or reflection of the electromagnetic energy by the product.

2. An apparatus as defined in claim 1, wherein the product is a contact lens.

3. The apparatus according to claim 2, wherein the container comprises a reflective foil which reflects electromagnetic energy.

4. An apparatus as defined in claim 2, wherein the source emits electromagnetic energy having a wavelength in the ultraviolet range.

5. The apparatus according to claim 4, wherein the source emits pulsed electromagnetic energy having a wavelength in the ultraviolet range.

6. An apparatus as defined in claim 2, wherein the source emits electromagnetic energy having a wavelength in the infrared range.

7. An apparatus as defined in claim 2, wherein the contact lens contains an ultraviolet absorbing media which absorbs electromagnetic energy in the ultraviolet range.

8. An apparatus as defined in claim 1, wherein said processor comprises a lookup table.

9. An apparatus as defined in claim 7, wherein said processor comprises a neural network algorithm.

10. An apparatus as defined in claim 2, wherein the source emits electromagnetic energy in the visible range and said contact lens contains a tint.

11. An apparatus as defined in claim 2, wherein the lens is a hygroscopic lens.

12. An apparatus as defined in claim 2, wherein the lens includes a media which absorbs or reflects electromagnetic energy of a wavelength in a specified range, and the container includes a receptacle for the lens and is constructed from a material which absorbs or reflects the electromagnetic energy differently than the lens.

13. An apparatus as defined in claim 2, wherein said lens includes a media which absorbs or reflects electromagnetic energy having a wavelength in a specified range and said detector is sensitive to electromagnetic radiation in the specified range.

14. An apparatus as defined in claim 2, further comprising a plurality of sources and a plurality of detectors disposed relative to each other for detecting the presence or position of a contact lens in a container.

15. An apparatus as recited in claim 1, wherein said detector is a calorimeter.

16. An apparatus as recited in claim 1, wherein said detector is a spectrometer.

17. The apparatus recited in claim 16, further comprising a filter.

18. The apparatus according to claim 1, further comprising one to one hundred detectors.

19. The apparatus according to claim 1, further comprising one to twenty detectors.

20. An apparatus for detecting the presence of an ophthalmic product in a container comprising:

(a) a source of electromagnetic energy located relative to the container to direct electromagnetic energy at the container;

(b) a reflective surface located such that the container is displaced between the source and the reflective surface;

(c) a detector disposed relative to the container and the source to detect electromagnetic energy from the source which is reflected by the product, the container, and the reflective surface; and

(d) a processor for determining the presence or position of the product in the container responsive to the fluorescence, absorption or reflection of the electromagnetic energy by the product.

21. A method for detecting the presence or position of an ophthalmic product in a container, the product including a media which fluoresces, absorbs or reflects the electromagnetic energy of a frequency in a specified range, the method comprising:

(a) directing electromagnetic energy at the product and the container;

(b) detecting the absence of or reduction in electromagnetic energy of a frequency in a specified range which passes through or is reflected by the product and the container; and

(c) processing the detected electromagnetic energy to determine the presence or position of the product in the container.

22. A method as defined in claim 21, wherein the electromagnetic radiation is in the ultraviolet range.

23. A method as defined in claim 21, wherein the electromagnetic radiation is in the infrared range.

24. The method of claim 21, wherein said electromagnetic radiation of said directing step is of a frequency in the specified range.

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